

RECOMBINANT HUMAN ALPHA-FETOPROTEIN AS A CELL PROLIFERATIVE AGENT.

Robert A. Murgita Filing Date: June 20, 1997

U.S. Serial No. 08/879,469

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ATGCTGCTCCACCACTGCCAAATACAAATACTGCCAAC
 -1
 1 met lys trp val glu ser ile phe leu ile phe leu leu asn phe thr glu ser arg
 10 ACA CTC CAT AGA ATA GAA TAT GGA ATA ATT TTT TTA ATT TTC CTA CTA AAT TTT ACT GAA TCC AGA (101)
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 31 thr leu his arg asn glu tyr gly ile ala ser ile leu asp ser tyr gln cys thr ala glu ile ser leu ala asp leu ala thr ile
 40 phe phe ala gln phe val gln glu ala thr tyr lys glu val ser lys met val lys asp ala leu thr ala ile glu lys pro thr gly
 50 TTT TTT GCC CAG TTT GTR CAA GAA GCC ACT TAC AGC GAA GTA AGC AAA ATG GTG AAA GAT GCA TGG ACT GCA ATT GAG AAA CCC ACT GGA (191)
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 91 asp glu gln ser ser gly cys leu glu asn gln leu pro ala phe leu glu glu leu cys his glu lys glu ile leu glu lys tyr gly
 100 CAT TCA GAG TCT TCA GGG TGT TTA GAA AAC CAG CTA CCT GCC TTT CTC GAA GAA CTT TGC CAT GAG AAA GAA ATT TTG GAG AAG TAC GGA (371)
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Fig. IA

RECOMBINANT HUMAN ALPHA-FETOPROTEIN AS A CELL
PROLIFERATIVE AGENT.

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211 phe gly thr arg thr phe gln ala ile thr val lys leu ser gln lys phe thr lys val asn phe thr glu ile gln lys leu val
TTT GGG ACC CGA ACT TTC CAA GCC ATA ACT GTT ACT AAA CTG AGT CAG AAC TTT ACC AAA GTT ATT TTT ACT GAA ATC CAG AAA CTA GTC (821)
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leu asp val ala his val his glu his cys cys arg gly asp val leu asp cys leu gln asp gly glu lys ile met ser tyr ile cys
CTG GAT GTG GCC CAT GTA CAT GAG CAC TGT TGC AGA GGA GAT GTG CTG GAT TGT CTG CAG GAT GGG GAA AAA ATC ATG TCC TAC ATA TGT (911)
271 280
ser gln gln asp thr leu ser asn lys ile thr glu cys cys lys leu thr thr leu glu arg gly gln cys ile ile his ala glu asn
TCT CAA CAA GAC ACT CTG TCA AAC AAA ATA ACA GAA TGC TGC AAA CTG ACC ACC CTG GAA CGT GGT CAA TGT ATA ATT CAT GCA GAA ATT(1001)
301 310
asp glu lys pro glu gly leu ser pro asn leu asn arg phe leu gly asp arg asp phe asn gln phe ser ser gly glu lys asn ile
GAT GAA AAA CCT GAA GGT CTA TCT CCA ATT CTA AAC AGG TTT TTA GGA GAT AGA GAT TTT AAC CAA TTT TCT TCA GGG GAA AAA ATT ATC(1091)
331 340
phe leu ala ser phe val his glu tyr ser arg his pro gln leu ala val ser val ile leu arg val ala lys gly tyr gln glu
TTG TTG GCA AGT TTT GTT CAT GAA ATT TCA AGA AGA CAT CCT CAG CTT GCT GTC TCA GAA ATT CTA AGA GTR GCT AAA GGA TAC CAG GAG(1181)
361 370
leu leu glu lys cys phe gln thr glu asn pro leu glu cys gln asp lys gly glu glu glu leu gln lys tyr ile gln glu ser gln
TTA TTG GAG AAC TGT TTC CAG ACT GAA AAC CCT CTT GAA TGC CAA GAT AAA GGA GAA GAA TTA CAG AAA TAC ATC CAG GAG AGC CAA(1271)
391 400
ala leu ala lys arg ser cys gly leu phe gln lys leu gly glu tyr tyr leu gln asn ala phe leu val ala tyr thr lys lys ala
GCA TTG GCA AAG CGA AGC TGC GGC CTC TTC CAG AAA CTA GGA GAA ATT TAC TTA CAA ATT GCG TTT CTC GTC GCT TAC ACA AAC AAA GCC(1361)
421 430
pro gln leu thr ser ser glu leu met ala ile thr arg lys met ala ala ala thr cys cys gln leu ser glu asp lys leu
CCC CAG CTG ACC TCG TCG GAG CTG ATG GCC ATC ACC AGA AAA ATG GCA GCC ACA GCA GCC ACT TGT TGC CAA CTC AGT GAG GAC AAA CTA(1451)
440 450

Fig. 1B



RECOMBINANT HUMAN ALPHA-FETOPROTEIN AS A
CELL PROLIFERATIVE AGENT.

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451 leu ala cys gly glu gly ala ala asp ile ile ile gly his leu cys ile arg his glu met thr pro val asn pro gly val gln 460
TTC GCC TGT GGC GAG GGA CGG CCT GAC ATT ATT ATC GGA CAC TTA TGT ATC AGA CAT GAA ATG ACT CCA GTA AAC CCT GGT GTT GGC CAG(1541)
481 cys cys thr ser ser tyr ala asn arg arg pro cys phe ser ser leu val val asp glu thr tyr val pro pro ala phe ser asp asp 490
TGC TGC ACT TCT TCA TAT GGC AAC AGG AGG CCA TGC TTC AGC AGC AGC TTG GTG GTG GAT GAA ACA TAT GTC CCT CCT GCA TTC TCT GAT GAC(1631)
511 lys phe ile phe his lys asp leu cys gln ala gln gly val ala leu gln thr met lys gln glu phe leu ile asn leu val lys gln 520
AAG TTC ATT TTC CAT AAG GAT CTG TGC CAA GCT CAG GGT GTA GCG CTG CAA ACG ATG AAG CAA GAG TTT CTC ATT AAC CTT GTG AAG CAA(1721)
541 lys pro gln ile thr glu glu gln leu glu ala val ile ala asp phe ser gly leu leu glu lys cys cys gln gly gln gln glu 550
AAG CCA CAA ATA ACA ACA GAG GAA CAA CTT GAG GCT GTC ATT GCA GAT TTC TCA GGC CTG TTG GAG AAA TGC TGC CAA GGC CAG GAA CAG GAA(1811)
571 val cys phe ala glu glu gly gln lys leu ile ser lys thr arg ala ala leu gly val ter 580
GTC TGC TTT GCT GAA GAG GGA CAA AAA CTG ATT TCA AAA ACT CGT GCT GCT TTG GCA GTT TAA ATTACTTCAGGGAGAGAGACACAGAGCT(1908)
TCATTCGGCTGTGACTTTCTTTATACGATTACATTGAGATTCTCAATATTCCAA(2027)

Fig. 1C

RECOMBINANT HUMAN ALPHA-FETOPROTEIN AS A CELL
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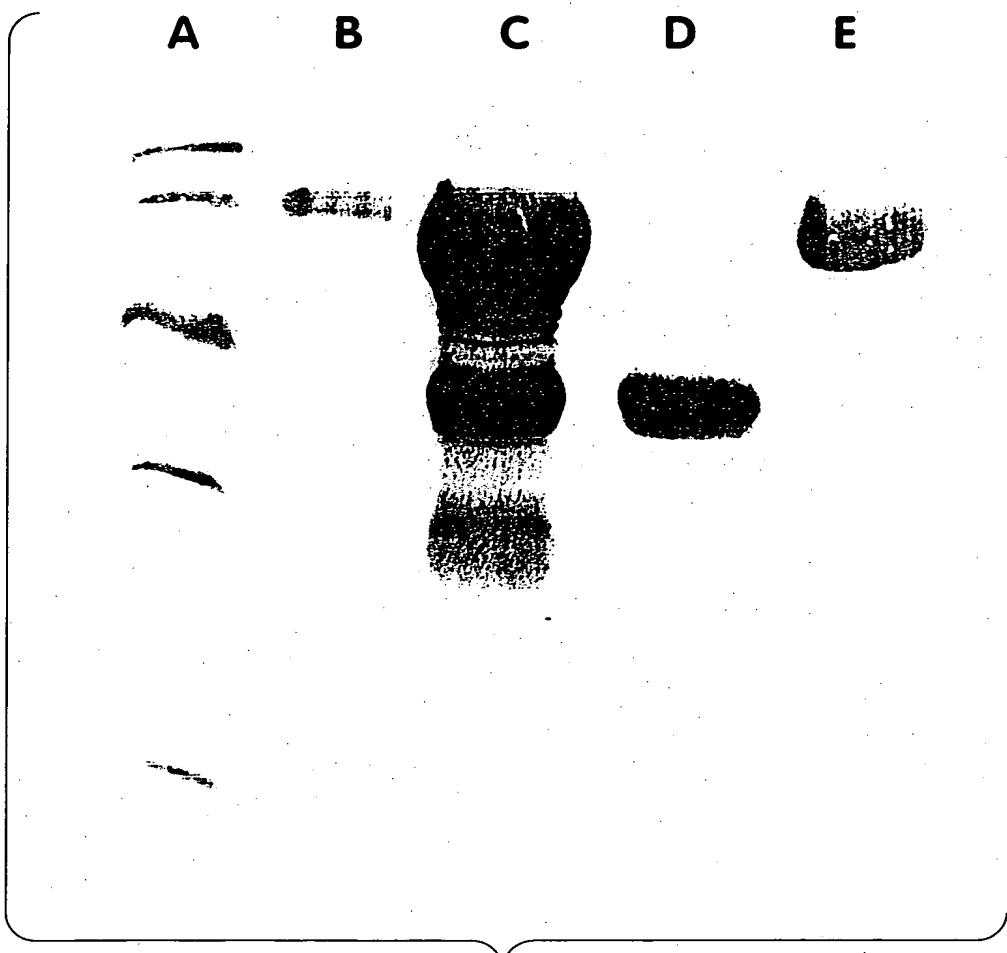


Fig. 2



RECOMBINANT HUMAN ALPHA-FETOPROTEIN AS A CELL
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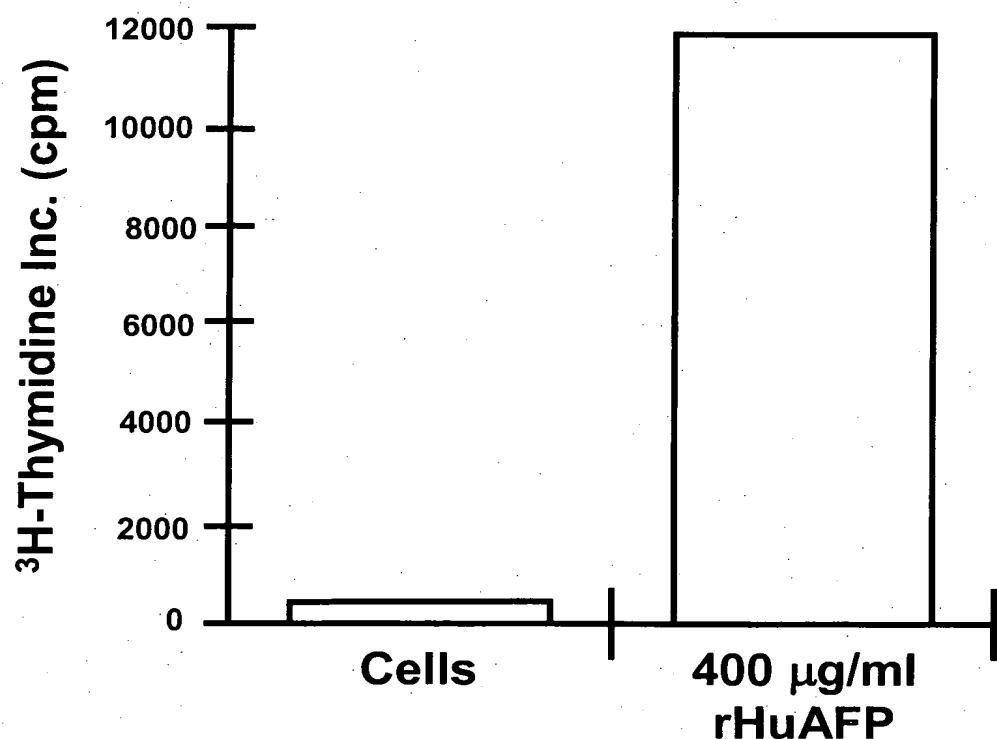


Fig. 3